## 1. A method comprising:

controlling a variable power supply to supply power at approximately a first supply level for an electronic device;

controlling the variable power supply to control a transition of the power from approximately the first supply level toward a second supply level prior to controlling the variable power supply to supply power at approximately the second supply level for the electronic device; and

dynamically controlling a value of one or more power supply controller parameters in controlling the variable power supply to control the transition of power.

- 2. The method of claim 1, comprising identifying that the second supply level satisfies one or more of one or more predetermined conditions.
- 3. The method of claim 2, comprising identifying that the power for the electronic device is to change to the second supply level in response to a change between different operation states of the electronic device.
- 4. The method of claim 2, comprising identifying that the difference between the second supply level and the first supply level satisfies one or more of one or more predetermined relationships with one or more thresholds.
- 5. The method of claim 2, comprising identifying that the second supply level satisfies one or more of one or more predetermined relationships with one or more supply level ranges.

- 6. The method of claim 1, wherein the dynamically controlling comprises controlling a value of one or more power supply controller parameters based on one or more operating parameters of the electronic device.
- 7. The method of claim 6, wherein the dynamically controlling comprises controlling the value of one or more power supply controller parameters based on a power supply level.
- 8. The method of claim 6, wherein the dynamically controlling comprises controlling the value of one or more power supply controller parameters based on an operation state of the electronic device.
- 9. The method of claim 6, wherein the dynamically controlling comprises controlling the value of one or more power supply controller parameters based on a supply level range.
- 10. The method of claim 1, wherein the dynamically controlling comprises controlling the value of one or more control system loop filter compensator settings, one or more modulator settings, one or more digital-to-analog converter settings, and/or one or more analog-to-digital converter settings.
- 11. An electronic device comprising:

a supply level controller coupled to control a variable power supply to supply power at a supply level for the electronic device;

a transition-to-target controller coupled to control the supply level controller to control
the variable power supply to supply power at approximately a first supply level for the electronic
device and to control the variable power supply to control a transition of the power from
approximately the first supply level toward a second supply level prior to controlling the variable
power supply to supply power at approximately the second supply level for the electronic device;
and

a controller parameter(s) controller coupled to control one or more power supply controller parameters for the supply level controller dynamically as the supply level controller controls the variable power supply to supply power for the electronic device.

- 12. The electronic device of claim 11, wherein the transition-to-target controller comprises circuitry to identify that the second supply level satisfies one or more of one or more predetermined conditions.
- 13. The electronic device of claim 12, wherein the transition-to-target controller comprises circuitry to identify that the power for the electronic device is to change to the second supply level in response to a change between different operation states of the electronic device.
- 14. The electronic device of claim 12, wherein the transition-to-target controller comprises circuitry to identify that the difference between the second supply level and the first supply level satisfies one or more of one or more predetermined relationships with one or more thresholds.

- 15. The electronic device of claim 12, wherein the transition-to-target controller comprises circuitry to identify that the second supply level satisfies one or more of one or more predetermined relationships with one or more supply level ranges.
- 16. The electronic device of claim 11, wherein the controller parameter(s) controller comprises circuitry to control one or more power supply controller parameters based on one or more operating parameters of the electronic device.
- 17. The electronic device of claim 16, wherein the controller parameter(s) controller comprises circuitry to control one or more power supply controller parameters based on a power supply level.
- 18. The electronic device of claim 16, wherein the controller parameter(s) controller comprises circuitry to control one or more power supply controller parameters based on an operation state of the electronic device.
- 19. The electronic device of claim 16, wherein the controller parameter(s) controller comprises circuitry to control one or more power supply controller parameters based on a supply level range.
- 20. The electronic device of claim 11, wherein the supply level controller comprises a modulator and wherein the controller parameter(s) controller comprises circuitry to control one or more settings for the modulator.

- 21. The electronic device of claim 11, wherein the supply level controller comprises a loop filter and wherein the controller parameter(s) controller comprises circuitry to control one or more compensator settings for the loop filter.
- 22. The electronic device of claim 11, wherein the supply level controller comprises an analog-to-digital converter (ADC) and wherein the controller parameter(s) controller comprises circuitry to control one or more settings for the ADC.
- 23. The electronic device of claim 11, wherein the supply level controller comprises a digital-to-analog converter (DAC) and wherein the controller parameter(s) controller comprises circuitry to control one or more settings for the DAC.

## 24. An apparatus comprising:

means for controlling a variable power supply to supply power at approximately a first supply level for an electronic device;

means for controlling the variable power supply to control a transition of the power from approximately the first supply level toward a second supply level prior to controlling the variable power supply to supply power at approximately the second supply level for the electronic device; and

means for dynamically controlling a value of one or more power supply controller parameters as the variable power supply is controlled.

25.	The a	apparatus	of claim 2	24, compr	ising mear	ns for perfo	rming one	or more BO	DRSCHT	
functions.										
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